

reason to believe there is a marked color change without moult or abrasion. The wing- and tail-feathers are moulted but once a year, in August and September.

The Willow Goldfinch is a characteristic inhabitant of the willow copses which border the marshes and sluggish streams of the lowlands. In summer, in Southern California, it is confined almost exclusively to these localities. But in fall and winter it gathers in small flocks and haunts the sunflower patches on the mesas, and even the mountain cañons, feeding on the buds and seeds of the sycamores and alders.

I am indebted to Mr. Robert Ridgway of the National Museum for suggestions in regard to this paper, and to the authorities of the National Museum for the loan of a series of *S. tristis* for comparison.

a THE SITKAN KINGLET.

BY WILLIAM PALMER.

THREE adult summer Ruby-crowned Kinglets, collected by Mr. Joseph Grinnell near Sitka, Alaska, and two others, a spring male and an immature, collected at the same place by Fred. Bischoff, differ so much from many specimens of *Regulus calendula* with which I have compared them as to be worthy of separation by name.

Regulus calendula grinnelli, subs. nov. SITKAN KINGLET.

Differential Characters.—Above sooty dark olive (similar to *R. obscurus*) darkening to blackish along sides of vermilion crown patch. Beneath, throat and breast dusky gray; abdomen whitish tinged with yellowish. Bill slenderer at tip and broader at base than in *calendula* and laterally indented in the center. Wings with dark parts nearly black. Size between *R. calendula* and *R. obscurus*. Type, adult ♂, No. 160931, U. S. Nat. Mus. Collection (No. 1161, J. G. Coll.). Collected by Joseph Grinnell, June 23, 1896, Sitka, Alaska.

Immature [♂].—Above rich brownish olive, much darker than in *calendula* of same age. Beneath brighter than in same. Size smaller with longer and more slender bill. Wings darker with narrower and yellower bars. No. 45928, U. S. Nat. Mus. Coll., Sitka, 1866; Fred. Bischoff.

The Sitkan Kinglet is a smaller and darker bird than its near relative *R. calendula*, approaching closer, except in the coloring of its crown patch, to *R. obscurus* of Guadalupe Island. It lacks the grayness and paleness above and on the sides of the head and neck characteristic of *calendula*. The bill is larger and differently shaped. The wing is much darker, nearly black in places, and the anterior bar especially is narrower. The female bird I have not seen.

It is probable that *grinnelli* will prove to be a resident or a slightly migratory coast bird about Sitka and eastward and southward, as indicated by its shorter wings. More northern Alaskan examples are *calendula*. Two winter specimens, out of a large number examined from California, are differently intermediate; one being nearly similar in coloration to *grinnelli*, and both having similar bills, but with longer wings and tails. The character of the climate about Sitka is shown by the following extract from a 'circular' dated July 29, 1897, and compiled by the Chief of the Weather Bureau of the U. S. Department of Agriculture. "The fringe of islands that separates the mainland from the Pacific Ocean from Dixon Sound northward, and also a strip of the mainland for possibly 20 miles back from the sea, following the sweep of the coast as it curves to the northwestward to the western extremity of Alaska, form a distinct climatic division which may be termed temperate Alaska. The temperature rarely falls to zero; winter does not set in until about December 1, and by the last of May the snow has disappeared except on the mountains. The mean winter temperature of Sitka is 32.50, but little less than that of Washington, D. C. . . . The rainfall of temperate Alaska is notorious the world over not only as regards the quantity that falls, but also as to the manner of its falling, viz.: In long and incessant rains and drizzles. Cloud and fog naturally abound, there being on an average but 66 clear days in the year." Under such conditions *grinnelli* has been differentiated from its relative *calendula*. The type locality of this last is 'Pensylvania.'

My thanks are due Mr. Ridgway for the opportunity of examining the specimens in his care, and to Mr. Grinnell, for whom the form is named, for kindly presenting the type, together with many other specimens of birds, to the National Collection.

MEASUREMENTS OF REGULUS CALENDULA GRINNELLI.

No.	Age.	Sex.	Date.	Locality.	Collector.	Wing.	Tail.	Culmen.	Tarsus.	Remarks.
45929	ad.	♂	May — 1866.	Sitka, Alaska.	Fred. Bischoff.	2.20	1.72	.14	.76	Yearling?
1108	"	♂	June 10, 1896.	"	Joseph Grinnell.	2.20	1.71	.15	.80	Type.
1161	"	♂	" 23, "	"	"	2.22	1.72	.15	.80	
1230	"	♂	July 2, "	"	"	2.22	1.70	.15	.78	
45928	im.	♂	Sept. — 1866.	"	Fred. Bischoff.	2.05	1.66	.13	.70	

MEASUREMENTS OF REGULUS CALENDULA.

58408	ad.	♂	May 9, 1860.	Fort Kenay, Alaska.	Fred. Bischoff.	2.35	1.78	.15	.80
54391	"	♂	" 10, 1868.	Nulato, Alaska.	W. H. Dall.	2.30	1.78	.15	.75
54392	"	♂	" 15, "	"	"	2.30	1.77	.15	.78
19482	"	♂	" 17, 1860.	Ft. Resolution.	B. Kennicott.	2.31	1.81	.15	.80
89277	"	♂	[July] 1881.	Moose Factory, H. B. Terr.	Walton Hayden.	2.31	1.76	.15	.73
89276	"	♂	"	"	"	2.33	1.81	.14	.80
66706	"	♂	May 30, 1873.	Garland, Col.	H. W. Henshaw.	2.40	1.85	.15	.83
110643	"	♂	" 7, 1886.	10,000 ft., "	Denis Gale.	2.42	1.90	.16	.80
90088	"	♂	" 12, 1881.	Carberry, Manitoba.	E. E. Seton.	2.35	1.76	.14	.80
119959	"	♂	Apr. 28, 1890.	Laurel, Md.	R. Ridgway.	2.26	1.73	.14	.82
124194	"	♂	" 15, 1888.	Washington, D. C.	C. W. Richmond.	2.40	1.78	.15	.81
124196	"	♂	"	"	"	2.35	1.70	.15	.79
1150	"	♂	" 17, 1883.	Arlington, Va.	W. Palmer.	2.35	1.80	.14	.76
1565	"	♂	May 1, 1887.	"	"	2.30	1.80	.13	.80
2703	"	♂	Apr. 12, 1891.	"	"	2.30	1.80	.14	.80

INTERMEDIATES.

160932	ad.	♂	Jan. 10, 1891.	Los Angeles, Cal.	Wm. Berman.	2.38	1.80	.14	.77	Dark.
160933	"	♂	" " "	"	"	2.40	1.80	.14	.71	Paler.